3.0 FIRST DETONATION AT CAMP GRANT

3.1 Detonation Site

The first detonation took place on 30 August 1995. A survey crew discovered a 3" stokes mortar round on the surface of the ground while laying out grids for the magnetometer search. This round is shown in Figure 3.1 before it was transported to the quarry area.

The bunker shown in Figure 2.2 was used to attempt the detonation of the first UXO found (stokes mortar). The bunker was approximately 10' square on the outside and approximately 5' square on the inside with the walls being approximately 5' high. One wall, facing east had an opening or door located about 2' from the free standing sandbag wall. The 3" stokes mortar round was placed on a bed of sand in the bunker, counter-charged on top with 1/4 lb. of yellowstick explosive, and buried with sand to the level of the top sand bags after the opening in the bunker had been closed with a stack of sandbags. This represents a scaled depth of burial based on a 1/2 lb NEW of 135 ft./ton. At this depth, uplift and venting of gaseous products will occur with no measurable ejecta generated (nearly completely tamped explosion).

3.2 Sampling

Sample collection pans were placed in the same locations from which background samples had been collected (see Figure 2.1). The detonation produced no fallout so that the pans were clean. The sand in the bunker was not measurably disturbed and the bunker was not damaged except for the single stack of sandbags in the opening being moved slightly outward (Figure 3.2).

The demolition crew removed sand from the bunker until the mortar round was found. From the appearance of the round, it was obvious that it had been inert (Figure 3.3). Only two samples were collected, one from the small amount of kickout sand on top of the sandbags on the southwest corner of the bunker and one from the area of the pit where the projectile was found after the detonation.

3.3 Laboratory Analysis of the Samples

A decision was made not to analyze the samples collected after the first demolition shot since the round was inert and the only analytes recovered were from the 1/4 lb. initiator charge and were completely contained in the sand surrounding the explosion. The whitish products surrounding the detonation was N_aOH and $N_{a2}CO_3$, neither of which constitute hazards.

Figure 3.1 Stokes Mortar Prior to Demolition in the Bunker

Figure 3.2 Photo Showing Movement of Sandbags Covering Opening to the Demolition Pit (center of photo) Resulting From the 1/2 Pound Initiator Charge

Figure 3.3 Stokes Mortar as Uncovered (a) and Removed to the Top of the Bunker (b) White Residue in (a) is N_aOH and $N_{a_2}CO_3$